

AUGUST 4.

Mr. CHAS. ROBERTS in the chair.

Sixteen persons present.

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AUGUST 11.

Mr. CHAS. MORRIS in the chair.

Eleven persons present.

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AUGUST 18.

Mr. CHAS. MORRIS in the chair.

Sixteen persons present.

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AUGUST 25.

Mr. CHAS. MORRIS in the chair.

Seventeen persons present.

*Mollusca from Nantucket, Mass.*—MR. H. A. PILSBRY exhibited four trays and one bottle of land and fresh-water mollusks collected by Dr. Harrison Allen in Nantucket, and stated that with the exception of *Helix hortensis* no land or fresh-water shells had heretofore been reported from that island.

The species collected are as follows: *Helix hortensis*, *Zonites (Hyalinia) arboreus*, *Limnæa columella* var. and a small species of the bivalve *Pisidium*. The two latter are typically fresh-water mollusks. *Helix hortensis* has been lately regarded by some conchologists as a native American, not an importation from Europe as all earlier students of our shells supposed. There is much evidence in favor of this view. Dr. W. H. Dall in conversation with the speaker has stated that the shells have been found in pre-historic shell-heaps (kitchen-middings) on the Maine coast, at considerable depths. The genitalia of specimens collected alive in Nantucket by Dr. Allen seem to agree very closely with the figures of German and English specimens given by Schmidt and Ashford. They have the characteristic dart-sack, the mucus or multifid glands composed of four long cœcæ, etc. *Zonites arboreus* is not different from specimens of that species found over the greater part of North America. The specimens referred to *Limnæa columella* are very small, slender, ex-

cessively fragile, and are beautifully decussated by spiral striæ and growth-lines, which cut the surface into little squares. Whorls  $3\frac{1}{2}$ , length 8.2, width 4.2 mill.; length of aperture 5.6, width 3 mm.; color light brown. It is probably a local race, as I have seen none like them from the mainland.

The *Pisidium* is a small form which I have not identified specifically. A specimen of *Ancylus* found by Dr. Allen was lost.

*Geological Features of the Meteoric Iron Locality in Arizona.*—DR. A. E. FOOTE described the remarkable geological features of the locality where he had found meteoric iron containing diamonds, an unreported communication on which had been made by Prof. G. A. Koenig before the Academy at the meeting of June 23rd, 1891.

Nearly all the small meteoric fragments were found at a point about ten miles southeast from Cañon Diablo near the base of a nearly circular elevation which strikingly resembles an old crater and is known locally as "Crater Mountain." He believed this to be the same as Sunset Knoll figured on the topographical sheets of the U. S. Geological Survey. It is 185 miles due north from Tucson and 300 miles west of Albuquerque. The signet iron was discovered about 30 miles from Tucson.

This elevation, according to the Survey, rises 432 feet above the plain. Its center is occupied by a cavity nearly three-quarters of a mile in diameter, the sides of which are so steep that animals which have descended into it have been unable to escape and have left their bleached bones at the bottom, which seemed to be from fifty to one hundred feet below the surrounding plain. The rocks which form the rim of the so-called "crater" are sandstone and limestone and are uplifted on all sides at an almost uniform angle of from thirty-five to forty degrees. A careful search, however, failed to reveal any lava, obsidian or other volcanic production.

Prof. Gilbert had suggested that this so-called "crater" was like the depressions on the surface of the moon produced by the impact of an enormous meteoric mass. This view had been supported by other gentlemen, one of whom said that the diamonds at Kimberly probably came from the decomposition of meteorites that had produced the depressions in which the precious stones are found.

*Hemiarcyria clavata* Pers.—DR. GEO. H. REX described the structure of the capillitium of *Hemiarcyria clavata*, illustrating his remarks by a mounted slide under the microscope. As most of the descriptions of the Mycetozoa have been drawn from examinations made with objectives of moderate powers, many very interesting and unexpected results in the study of even familiar and well known species may be obtained by the use of homogeneous immersion or other higher power objectives.

As an example of one of the surprises of this kind, the speaker instanced the common *Hemiarcyria clavata* Pers.